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EXTENSION SERVICE

REVIEW

U.S. DEPARTMENT OF AGRICULTURE * DECEMBER 1968

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The Extension Service Review is for Extension educators—in County, State, and Federal Extension agencies—who work directly or indirectly to help people learn how to use the newest findings in agriculture and home economics research to bring about a more abundant life for themselves and their communities.

The Review offers the Extension worker, in his role of educational leader, professional guideposts, new routes and tools for speedier, more successful endeavor. Through this exchange of methods, tried and found successful by Extension agents, the Review serves as a source of ideas and useful information on how to reach people and thus help them utilize more fully their own resources, to farm more efficiently, and to make the home and community a better place to live.

ORVILLE L. FREEMAN
Secretary of Agriculture

LLOYD H. DAVIS, Administrator
Federal Extension Service

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Director: Walter John
Editor: W. J. Whorton
Assistant Editor: Mary Ann Wamsley

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EXTENSION SERVICE

REVIEW

Official monthly publication of Cooperative Extension Service; U. S. Department of Agriculture and State Land-Grant Colleges and Universities cooperating.

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It's Here!

That long-awaited document, the Report of the USDA-NASULGC Long Range Study Committee, was released at the annual meeting of the National Association of State Universities and Land-Grant Colleges.

This report represents the most comprehensive study ever conducted of the Cooperative Extension Service. The conclusions and recommendations are based on the analysis of literally thousands of pieces of data gathered specifically for this study. Special attention was devoted to the sections on commercial agriculture, quality of living, economic and social development, and foreign agriculture. It was 2 years in the making.

To do the job the committee recommends will require closer working relationships with other departments of the Federal Government, with other colleges in the land-grant universities, and with USDA. Private industry, the predominantly Negro land-grant colleges, and non-land-grant universities are mentioned in the study report for possible cooperative arrangements.

Dr. George L. Mehren, former Assistant Secretary of Agriculture, and Dr. W. Robert Parks, president, Iowa State University, co-chaired the committee of 15 that developed the report. The members represented the Department of Agriculture, the land-grant colleges and universities, and the public. They have earned a vote of appreciation for a difficult and challenging task.

This report no doubt will leave an indelible imprint on the growth and evolution of the Cooperative Extension Service. It deserves your closest attention.—WJW

HURRICANE MESSAGES

a new
informational
tool

by

Tom Boyd

Assistant Editorial Specialist
Louisiana Extension Service

The less trouble it is for a radio station to use a public service announcement, the more frequently it will be used. Recognizing this, the Louisiana Cooperative Extension Service developed a new informational tool designed to fit into the routine operation of the broadcast medium.

The messages in this program deal with hurricane preparedness, but the form could be adapted to any subject that would benefit from long term exposure.

The tool is simple in design, consisting of 47 messages typed on 8- by 5-inch cards and bound with 1-inch rings. Back and front covers of hard pressboard give the package durability. There are several special messages for use in each month from May through October, the range of high hurricane frequency for the Gulf Coast.

Also included are specific messages for use after "hurricane watch" or "warning" announcements have been issued, and after-the-storm information on immediate relief and rehabilitation activities.

Each section of the kit is tabbed for easy use by the announcer. It is



The farm news director for a Louisiana radio station prepares to read a hurricane preparedness spot. The format of the Extension-provided kit is already familiar to him, since it is similar to that of many commercials he uses.

designed to be kept in the control room on the console board next to the announcer's work sheets.

The kit is small enough not to be in the way and fits into the announcer's ordinary work system. An "extra" to help popularize the kit with the announcer is a section of interesting facts about hurricanes. He can use this to brighten his format with conversational information.

The "Hurricane Messages" packet was developed by Tom Boyd, assistant specialist in civil defense, and John Leinhardt, assistant specialist in radio and television.

One difficulty of providing disaster information is trying to disseminate it during or immediately after the emergency. In the case of a hurricane, it is probable that radio will be the only media working and reaching people during this period. For that reason, it was decided to use radio for the Extension Service communication efforts until more normal and complete informational flows can be established.

"For Use in Emergency" kits furnished to radio stations are not always successful. It is likely that station personnel will forget to use them, be unable to locate them, or even may forget their existence if they have not been used for some time.

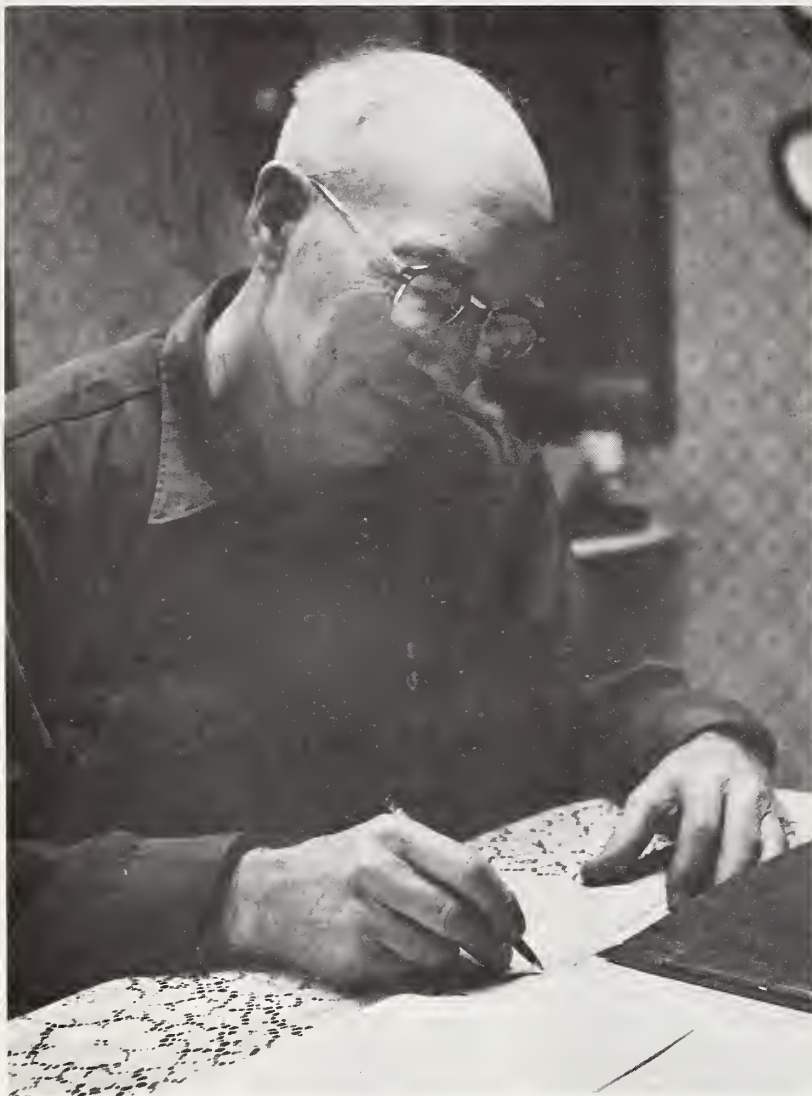
The purpose of this kit is to include not only emergency information but also other messages on general hurricane preparedness to be used during a 6-month period. If the kit can be established as a regular part of the operation, the announcer on duty will be more likely to turn to it at the first notice of an approaching hurricane.

The key to the success of the whole plan was the method of distribution. Mailing the kits directly to stations seemed undesirable, so county agents hand delivered them. They went over the kits with the station managers, and talked briefly with the announcer on duty.

Letters explaining the agent's visit were sent in advance to station managers.

The next step was to encourage use of the kit. One of the most important people at the station is the "traffic girl," who makes up the daily schedule of programing for the announcer. A special "Dear Girl Friday" letter was sent to each station asking the traffic girl to help.

Initial response from radio stations and county agents has been good. The project will be evaluated further, and if it has obtained the objective of increasing radio use of Extension Service messages, new projects of similar format will be developed. □



Earl Moore of Moore Orchards, Inc., prepares farm management data for processing at the computer center.

Don't Call It a Farm Record Project!

by
Frederick J. Smith
*Farm Management Specialist
Oregon State University*

It's difficult to imagine a group of farmers, who are notorious for keeping records on the backs of envelopes and barn doors, sitting in class for 30 hours, listening to lectures on economics, budgeting, simulation and computer programing, and paying an average of \$600 for the privilege.

But that's what is happening in Oregon, where some 50 farmers are involved in Oregon State University's Farm Management Technology Project. Both instructors and students get a little huffy if it's referred to as a farm record project.

Although centered on the concept of using a computer to tabulate farm expenses and receipts, it's much more than that. The project is primarily designed to teach farmers and ranchers about new farm management technology, with special emphasis on the application and use of that new technology.

Nearly all of the 1968 cooperators bring their wives to the classes, and some bring sons, daughters, or hired help. This totals as many as six "managers" for one cooperator. The 50 cooperators enrolled represent about 1 percent of Oregon's total farm income for 1967. They have an average gross income of \$131,356 and a range of over \$1 million. In the aggregate, the 1968 cooperators employ some 370 people and farm more than 80,000 acres.

Sometimes the payoff to cooperators comes as early as the first or second class. In the process of enrolling his farm, one cooperator discovered an error in his depreciation schedule. After corrections and adjustments, he saved enough to pay the enrollment fee with a little extra for spending money.

"The farmer who doesn't use the computer in managing his business will be as bad off financially as the farmer who doesn't use fertilizer on his crops," commented one cooperator in the project.

He's not alone. Most experts agree that farmers must upgrade their management input to stay in business.

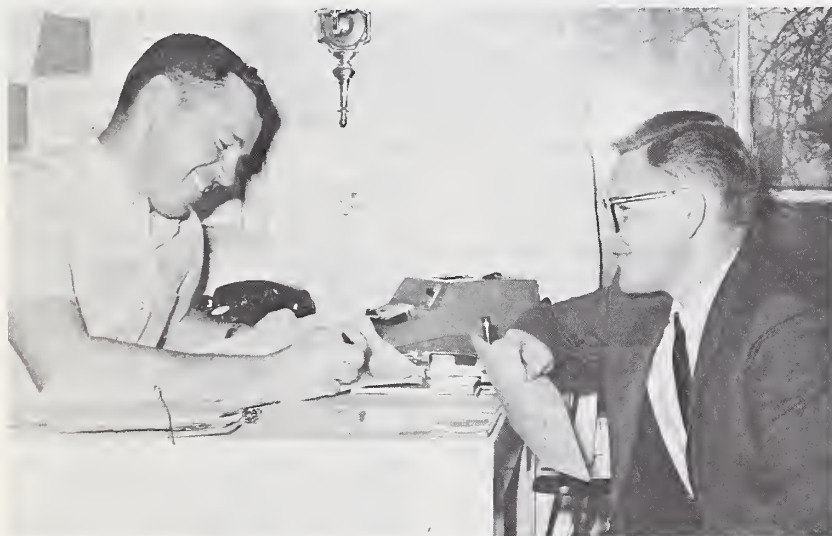
The technology is already here. Many private firms, as well as universities, are offering new management tools made possible by the computer revolution — tools that can help upgrade the farm management input.

Three years of experience in cooperatively developing and testing new management technology with other universities and private firms has demonstrated to us that farmers will find it difficult to adopt and utilize this new technology without a great deal of corresponding education.

Out of this concept, the Oregon Farm Management Technology Project was born. Cooperating farmers and ranchers enroll in the project and

Using their personal copy of an OSU-developed Farm Management Technology Notebook as a guide and reference, cooperating farmers report detailed financial and physical information to the computer center for processing. A private firm under contract to Oregon State University processes all the farm record information.

Neither the county agents nor the specialists, therefore, become involved in the mechanics of farm record processing. By using one of the most complete commercial electronic record systems, we give them a "ride" in the Rolls Royce of record systems before they go out shopping on their own.



Stanley Miles, right, farm management technologist, consults with a cooperator about his electronic records.

attend six classes over a 14-month period. Farm management specialists teach basic economic principles and decisionmaking as well as new management technology.

Among the most important parts of the project are the individual consultations with specialists and county agents (who are trained along with farmers,) and the cooperators' homework.

As important as the electronic farm records are in the Farm Management Technology Project, it is only one of five new types of management technologies they experience.

Each cooperator has his farm business, and each enterprise within the farm business, analyzed on the computer. Results are compared with other cooperators' farms with respect to efficiency and economic success.

This is akin to a physical checkup and diagnosis at the doctor's office with the computer performing the busy-work.

Each cooperating farm is then "linear programmed" to test alternative uses of such resources as land, labor, and capital.

Perhaps the most exciting part of the project is the Oregon Farm Management Simulation. Cooperators break up into teams to make a series of decisions regarding a hypothetical farm. They decide upon crops, fertilizer, water, land purchase, and machinery use and acquisition.

Team decisions are processed on the computer in a matter of seconds and the results of one year's farming are provided to each respective team for more decisionmaking. In this way, economic principles and decision tools are learned, tested, and evaluated.

County agents who have cooperators enrolled in the Farm Management Technology Project also participate in a series of training sessions emphasizing new farm management technology. The agents take part in the Oregon Farm Management Simulation, and the results of their team decisions are quickly compared with the farmer-cooperators' decisions (to the delight of some and consternation of others).

The county agent's primary role in the Farm Management Technology Project is in selecting potential co-operators and assisting cooperators in utilizing their computer reports. The county agent training sessions are therefore designed to keep the agents "tooled up" for this job.

Several financial success stories can be told, both by county agents and farmers involved in the Farm Management Technology Project, but perhaps the greatest reward is in the personal growth and achievement attained by the individual. As one cooperator testified, "I haven't made any changes in my farm yet, but I'm sure a different person than when I started this project." □

"Why don't you be honest and call it 3-H Club work?" was the question that caused Ohio to actively promote a 4-H Health Program in 1967. The question shook the staff.

An objective look showed that the fourth H — health — was a neglected area. That look also convinced the staff that definite action should be taken.

A State committee was appointed. Members included Albert Pugh, Extension specialist, community resource development; Ivan Archer, area Extension agent, 4-H; Helen Massengale, chief, Division of Health Education, Ohio Department of Health; and Beatrice Cleveland, assistant State leader, 4-H.

The committee reviewed what was being done. Action programs were few, evidences of tangible results were hard to find, resource materials for local clubs were not being provided. Some local clubs and a few counties were doing an excellent job in spite of limited assistance.

The committee decided to move. Subsequent major health program emphases and accomplishments can be divided into several categories.

Dental Hygiene Camp Programs

The committee suggested to Dr. Ernest J. Fedor, chief, Division of Dental Hygiene, Ohio Department of Health, that a dental hygienist be added to permanent 4-H camp staffs. Dr. Fedor liked the idea, and so did county Extension agents and camp boards. Participating in 1967 were 2,567 campers in two camps.

Donna Horton, dental hygienist at Camp Piedmont, said about her experience: "I was anxious for some practical experience in teaching, so I accepted the challenge of doing a summer program of dental hygiene education at Camp Piedmont. The Ohio Department of Health provided films, literature, toothbrushes, teaching aids, and my salary. The camp provided my maintenance and some materials."

X HEALTH,

can be a living
4-H leaf X

by

Beatrice Cleveland
*Assistant State 4-H Leader
Ohio Cooperative Extension Service*

Besides teaching, she conducted a written survey to ascertain the dental health care received by the children. The first night of each camp session she introduced her program to the campers and showed a film on dental care.

Each cabin visited with her at a designated time during the week for a 45- to 60-minute class. In the classes, campers discussed such subjects as the structure of the teeth, safety in regard to the teeth, the number and function of the teeth, the process of decay, the importance of professional dental care, nutrition in relation to teeth, and the proper method of brushing.

The last part of the class included practice in brushing teeth. All the campers were asked to bring their toothbrushes and toothpaste with them. If someone forgot his toothbrush, he was given a new one. Following brushing, the campers completed their surveys and then were dismissed.

Some of the visuals she used were plastic models of permanent and primary teeth, dental X-rays, dental instruments, natural teeth, posters to illustrate the anatomy of a tooth, and

a large set of teeth and giant toothbrush to demonstrate brushing.

A dental care display was set up in the dining room, and signs in the washrooms reminded the campers to brush. Several thousand pamphlets on dental care and careers in dentistry were also distributed to the campers.

"Altogether, I taught 1,700 campers," Miss Horton said, "and I really think the program went well."

Some comments from the campers' evaluations of the program were: "It helped me to learn more about preventing cavities" . . . "I feel like brushing at least twice a day now" . . . "It sort of scared me when you talked about teeth dying" . . . "I liked the X-rays of the teeth."

Camper and agent response were so favorable that the program expanded to include over 7,500 campers in four camps in 1968. It is hoped to extend the program to six or more camps in 1969. A 2-year plan is evolving which might alternate with a 2-year physical fitness camp program.

Physical Fitness Camp Program

Physical fitness activities set up at Camp Ohio and Camp Palmer included a balance beam, rope climb, horizontal ladder, chinning bars, broad



Donna Horton, dental hygienist at Camp Piedmont, used a large set of teeth and giant toothbrush to show campers the right way to brush. Classes for three or four groups of campers were held each day.

jump, softball throw, 50-yard dash, and a "what's it" box in a tree.

Campers compete not against each other but against a set of standards for their age group. They practice during free time. When they are ready, they are tested to see if they can meet the standards.

Those who achieve are given an ID certificate. Stamina, appearance, strength, and coordination are the key words for this program. Additional emphasis is given to physical fitness through hikes, obstacle courses, optional classes, exercises, and other outdoor programs.

4-H Health Statement

Wide use has been made of a health card developed for use at overnight 4-H events. At Club Congress, for example, a possible tragedy was averted when a diabetic was given prompt medical attention because of information the nurse had readily available on the card.

Health emphasis just through use of this card has been tremendous.

Some families have even established a family doctor because of the request for this information.

Local Club Activities

Every club has been encouraged to have a 4-H Health Committee. Committee members and local leaders have been given training in exploring possible health programs.

"Programs in Health," a 16-page guide, is available for club use. Emphasis is on Health Protection (including individual member health records); Clean Waters; Whatever You Do — Food Affects You; and Smiles and Frowns of Dental Health.

Information, suggested activities, and references are a part of each unit. Club committees determine the unit they want to pursue. Member leaflets are available for each unit.

Over 7,500 "Programs in Health," 33,000 health records, and 25,000 copies of each of the member leaflets have been requested by counties this year. Supplies were exhausted, and additional copies were reproduced.

These publications are attractive and well illustrated. They make health an action program with handles which clubs can grasp and use. Local leaders believe these tools will help them promote and carry out positive health programs of definite value.

"More Nutritious and Delicious" has been the theme of camp cooks' training classes and local club refreshment suggestions. The result — better food for campers and 4-H Club members. Even more important is the improvement of food habits among 4-H'ers and their families. Extension specialists and agents have served as classroom teachers in this area.

Cooperation and Creativity

The Ohio Department of Health has been extremely important in the development of the 4-H Health Program. Their cooperation in providing art, printed materials, and consultant services has been fantastic. The Ohio Medical Association has assisted by providing the individual member health records.

The 4-H staff has found that others have ideas and tangible assistance which they are ready and willing to share if given the opportunity. Members, leaders, agents, and other professional people are enthusiastic when given some inspiration and help. Once started, they go far beyond suggested programs.

"We are honest now when we call it 4-H Club work!" say the members of the Ohio 4-H Health Committee. Health CAN be a dynamic part of 4-H — but it takes ideas, work, materials, and cooperation to make it go. □

A farm laborer mounted a large tractor tire vertically in the feedlot so steers could walk through and scratch contentedly all over.

A home gardener welded a cross-piece on his dandelion digger so he could use foot pressure instead of hand pressure in digging dandelions.

A beer truck driver found a better way to wheel barrels off delivery trucks. Result: less time per stop, more stops per day.

Were these people creative? You bet.

Yet, they're ordinary, unheralded people. They just found a way to express themselves creatively in monotonous, unlikely circumstances. They don't fit the stereotype of the creative person—which is part genius, part kook, eccentric, disorganized, impetuous, ego-centered, flamboyant, temperamental.

The Research Institute of America explodes the following myths about creative stereotypes:

— *Creative people are eccentric.* This misunderstanding results from the fact that creative people have ideas, suggestions, work habits, and problem-solving approaches that may be unconventional. Creative people may seem odd because they thrive on challenges. But they don't have to be wild-eyed at all.

— *Creative people are disorganized loners.* Truth is, they usually are well organized. They have an exceptionally strong need to find order where there is none. They usually like and get along well with others. But they may want or need isolation and privacy when turning on their creative, productive steam.

Editor's Note: This article is an adaptation of the speech Mr. Cech presented at the annual conference of the American Association of Agricultural College Editors at the University of Tennessee last July.

— *Creative people refuse to adjust to company rules.* Creative people may abhor red tape and resent it, but this merely is their reaction to trivia. They may find ways to cut the red tape while working on important assignments.

— *Creative people demand a lot of coddling.* It's usually just the opposite. Creative people place a great premium on independence. They can tolerate frustrating, ambiguous situations more easily than less creative people.

We can conclude that creative people are normal, well adjusted, well organized, gregarious, and productive. And that creativity springs more from that type than from the unbridled, undisciplined one.

Creativity is not reserved for a few inordinately talented individuals born under some lucky star. And there is no reason to doubt that anyone can increase and improve his creative output.

Even the most creative people show varying degrees of creativity in different situations. Could Picasso have conceived an Atlas missile? Could Jack Nicklaus have designed the Memorial Arch in St. Louis? Maybe, with special training and application. But the most creative people in one field are not likely to be the most creative in another.

Most simply stated, creativity is a "break" with the usual way of showing or saying something. It's doing, seeing, explaining the ordinary in an imaginatively different way.

A discussion of "creative" versus "non-creative" is academic, for creativity is relative. We are either more creative or less creative than others — at a given time, in given situations, in given professions.

Researchers tell us there are ways to identify the more creative. Here's a checklist:

—The more creative usually can generate a large number of ideas rapidly on a given subject in a given situation.

Approaching

by
Richard J. Cech
Advertising Manager
Farm Journal

—The more creative are more nimble mentally.

—The more creative are original.

—The more creative prefer to find more complex solutions to problems, mostly because this presents a challenge.

—The more creative are tenacious. They're more likely to stick to their guns in disagreements with others.

—The more creative think they're different from their peers — but not in a conceited or vain sense.

—The more creative are more impulsive.

—The more creative have a less dogmatic, more relativistic view of life.

—The more creative may view authority as conventional rather than absolute, depending on the situation.

—The more creative have a good sense of humor.

—The more creative have broader, more universal, more cosmopolitan interests.

—The more creative tend to be more mobile than less creative people.

—The more creative tend to spend more time muddling through problems. They broadly scan all the alternatives, methodically dispose of blind alleys, suspend judgment until they get the full picture, then confidently make a decision and stick to it. They don't just jump right in and start solving.

the Ordinary With Imagination

are you doing your job creatively?

One definition of creativity describes it as the blending of musical instruments into pleasing harmony, not the noise of musicians tuning their instruments.

But perhaps a better definition is this one: **CREATIVITY IS THE ART OF MINING AND REFINING.** This suggests there must be work associated with creativity.

How do you go about finding creativity? Don't expect it to develop or demonstrate itself automatically, or in the same way in everyone.

Some have to have the excitement of brainstorming — an electric environment, charged with group ideagetting. Some need to be behind closed doors — after hours or on weekends — away from phones, people, meetings. Some can plan for and structure their time for creative production — set aside a time when they must and do create.

Still others stew and fret, collect and sift for a long time. Then, when the clock's about to strike 12 on their commitment, furiously jump into a marathon of productive, creative activity that would kill a rhinoceros.

Creativity comes from hard, disciplined work. It boils up from a dissatisfaction with the pedestrian. Creativity often comes from burning midnight oil, filling wastebaskets with discarded attempts from a succession of failures, from trial and error, from not giving up.

Lazy, uninhibited, and undisciplined people seldom breed creativity. Energetic, disciplined people do. Often they are most creative and most productive when they have heavy workloads, or are up against tough deadlines. They are least creative — and most miserable — when they have time to waste.

Creativity comes from open, active, curious, challenged, fertile minds. It requires a full mental bank of information and experiences to exist and perpetuate itself — a reservoir of resource material that never runs dry, one constantly fed by new ideas and impressions.

You keep the reservoir full by watching, looking, listening, by being inquisitive. You go to an art gallery or a zoo, to a good play or a movie; listen to the lines, watch the scenery, the photography, the conflicts that develop. You drive out of your parochial environment into something different — someplace you haven't been to before or for a while.

You enroll in a class on architecture, cybernetics, psychology, or ancient history. Participate in a discussion group, dig into new hobbies.

You listen attentively to someone else's ideas without worrying about opportunities to get in your 2 cents worth.

How do you kill creativity?

—Use clichés, clever innuendoes that only your profession understands.

—Avoid criticism. Or if you want

it, get it from your subordinates who'll be nice and considerate to the boss. Or you can take criticism lightly, figure it came from a bunch of jealous cranks.

—Prepare poorly for what you're going to create. Jump in without planning and thinking first. Get mired in trivia or irrelevant detail. Spend your energies evading the commitment you have.

—Get mentally lazy. Don't make waves. Let other chumps think, worry, create.

—Abandon ambition. Coast into retirement, physically and mentally. Just put in time on the job, and on whatever else you do. And don't do too much.

—Be a pushover for bizarre, seemingly clever ideas. Lose your objectivity in evaluating them. Forget about the soundness and usefulness of what you evaluate. Label anything different as creative.

We all thirst for creativity to produce great ideas. But great ideas aren't much good if they're not useful. And what's the need for any creativity, or more of it, except to find better, more useful solutions to problems?

Don't assume that once you have the incentive and have found the right environment, creativity will flow automatically and endlessly. Everyone gets tired, even creative people. Just don't take forever to recuperate — and don't get lazy! □

Professional Improvement Opportunities

. . . for Extension Home Economists

Grace Frysingher Fellowships

Two Grace Frysingher fellowships have been established by the National Association of Extension Home Economists to give Extension home economists an opportunity to study and observe Extension work in other States.

The \$500 fellowships cover expenses of one month's study. Each State may nominate one candidate. Nominations are due May 1, and selections will be made by the National Association scholarship committee. Applications are handled by the State Association Professional Improvement and Fellowship Chairman in cooperation with State home economics leaders.

Forms may be secured from the Professional Improvement Chairman of the State Extension Home Economists Association or from the national chairman, Mrs. Genevieve E. Lawrence, Box 698, Kearney, Nebraska 68847. □

Scholarships for Study of Extension Supervision

The Farm Foundation will offer 10 scholarships of \$200 each to Extension supervisors enrolling in the 1969 summer supervisory course at Colorado State University. Scholarships will be awarded to no more than one supervisor per State.

Applications should be made through the State Director of Extension to Dr. Denzil O. Clegg, Education and Research Coordinator, Extension Service, Colorado State University, Fort Collins, Colorado 80521. □

NAEHE Fellowship

One fellowship of \$2,000 has been established by the National Association of Extension Home Economists for a member of that organization. This fellowship is for the purpose of professional improvement through advanced study.

Each State may nominate one candidate. Nominations are made by the State scholarship committee and must be received by the National Professional Improvement Chairman by May 1. Final selection will be made by this national committee.

Forms may be secured from the Professional Improvement Chairman of the State Extension Home Economists Association or from the national chairman, Mrs. Genevieve E. Lawrence, Box 698, Kearney, Nebraska 68847. □

J. C. Penney

An annual fellowship of \$2,000 has been established by the J. C. Penney Co. to provide an opportunity for Extension home economists who have shown competence and achievement in home economics Extension programs to receive additional professional improvement through graduate study at the master's or doctoral level.

Each State may nominate one candidate. Nominations, due May 1, are to be sent to the National Professional Improvement Committee Chairman. Final selection is made by the national scholarship committee.

Forms may be secured from the Professional Improvement Chairman of the State Extension Home Economists Association or from the national chairman, Mrs. Genevieve E. Lawrence, Box 698, Kearney, Nebraska 68847. □

Tyson Memorial Fellowships

The Woman's National Farm and Garden Association offers two \$500 Sarah Bradley Tyson Memorial Fellowships for women who wish to do advanced study in agriculture, horticulture, and "related professions," including home economics.

Applications should be made by April 15, 1969, to Miss Violet Higbee, P.O. Box 113, Kingston, Rhode Island 02881. □

Kenneth F. Warner Grant for Extension Secretaries

Mu Chapter of Epsilon Sigma Phi is again offering one or more awards, not to exceed \$70 each, for professional improvement of Cooperative Extension Service secretaries.

The secretary must submit, with her application for the Warner award, a copy of the notification from the Institute for Certifying Secretaries that she is qualified to take the Certified Professional Secretary examination.

This means that prior to December 1, 1968, the secretary must (1) obtain CPS examination application forms from the Institute for Certifying Secretaries, 1103 Grand Avenue, Kansas City, Missouri 64106; and (2) complete and return those forms to the Institute.

Applications for the Warner grant may be obtained from the Staff Development Office, FES, and must be submitted no later than February 1, 1969. □

National Defense Graduate Fellowships

Under Title IV of the National Defense Education Act of 1958 as amended, the Commissioner of Education is authorized to award 3,328 fellowships for study in approved graduate programs leading to the doctorate.

... for Workers With 4-H and Youth

Washington State University

The Edward E. Graff Educational Grant of \$1,100 is for study in 4-H Club work in the State of Washington. Applications are due April 1. Contact Lester N. Liebel, State Leader, Extension Research and Training, 5 Wilson Hall, Washington State University, Pullman, Washington 99163. □

National Association of Extension 4-H Agents

The National Association of Extension 4-H Agents offers \$500 in scholarships to Extension youth agents from any State. The scholarships are for summer or winter Extension schools, travel study, or other graduate work.

For further information and application forms, contact Lowell Pierce, National Association of Extension 4-H Agents, Professional Improvement Committee Chairman, Courthouse, Waukesha, Wisconsin 53186. □

Rockford Map Publishers

Extension youth agents working in Minnesota, Wisconsin, Michigan, Illinois, and Pennsylvania are eligible for the \$100 graduate scholarship offered by the Rockford Map Publishers Company. It is for summer or winter Extension schools, travel study, or other graduate study. Deadline for application is January 1, 1969.

For further information and application forms, contact Lowell Pierce, National Association of Extension 4-H Agents, Professional Improvement Committee Chairman, Courthouse, Waukesha, Wisconsin 53186. □

Institutions submit applications to the Commissioner of Education for allotment of fellowships. Candidates apply directly to the graduate institutions, which nominate candidates to the Commissioner for the awards. Fellowships are tenable only in approved programs at the institutions to which they have been awarded.

A fellowship is normally a 3-year award providing a stipend of \$2,000 for the first academic year of study, \$2,400 for the second, and \$2,400 for the third, together with an allowance of \$400 a year for each dependent. An additional stipend of \$400, plus \$100 for each dependent, is available for summer study.

The announcement of approved programs will be made by the Commissioner of Education December 20. Applicants are advised to make inquiry at individual institutions concerning deadlines for receipt of fellowship applications.

An applicant must be a citizen or a national of the United States. He must intend to enroll in a course of study leading to the doctorate, and must be interested in an academic career of teaching in an institution of higher learning.

For further information, applicants should write directly to university officials concerned with graduate school programs. □

Postdoctoral Fellowships for Behavioral Scientists

The Center for Advanced Study in the Behavioral Sciences provides scholars free time (at their normal university salary) to devote to their own study and to associate with colleagues in the same or related disciplines. The Center requests nominations from certain graduate departments and research centers. Fields: the behavioral sciences. Write to the Director, Center for Advanced Study in the Behavioral Sciences, 202 Junipero Serra Boulevard, Stanford, California 94305. □

NSF Fellowships

The National Science Foundation Act of 1950 authorizes 2,300 graduate fellowships for the 1969-70 academic year. Half will be renewals or continuations of fellowships now held. The remainder will be awarded to unusually able applicants for study leading to master's or doctoral degrees in the physical, social, agricultural, biological, engineering, mathematical, and other sciences.

Fellowships will be awarded only to U.S. citizens who have demonstrated ability and aptitude for advanced training and have been admitted to graduate status prior to beginning their fellowship tenures.

Awards will be made at three levels: (1) first-year level, (2) intermediate level, and (3) terminal level. The basic annual stipend will be \$2,400 for the first-year level, \$2,600 for intermediate level, and \$2,800 for terminal level graduate students. In addition, each fellow on a 12-month tenure will be provided a \$500 allowance for a dependent spouse and each dependent child.

Application materials may be obtained from the Fellowship Office, National Research Council, 2101 Constitution Avenue, N.W., Washington, D.C. 20418. Applications must be received not later than December 6, 1968. □

NSF Graduate Traineeships

National Science Foundation will support an estimated 5,260 graduate students in 1969-1970 through its graduate traineeship program. Institutions in the United States conferring a Ph.D.-level degree in at least one of the sciences may apply for traineeship grants. The selection of individuals to hold traineeships is the sole responsibility of the grantee institutions. The names of these institutions will be announced by the National Science Foundation in January 1969. All inquiries about traineeships should be directed to the institutions. □

Scholarships in Extension Education, Related Fields

Farm Foundation Fellowships

This foundation offers fellowships to agricultural Extension workers, giving priority to administrators, including directors, assistant directors, and supervisors. County agents, home demonstration agents, 4-H Club workers, and specialists will also be considered. Staff members of the State Extension Services and USDA are eligible.

Courses of study may be one quarter, one semester, or nine months. The amount of the grant will be determined individually on the basis of period of study and need for financial assistance. Maximum grant will be \$4,000 for nine months' training.

It is suggested that study center on the social sciences and in courses dealing with educational administration and methodology. Emphasis should be on agricultural economics, rural sociology, psychology, political science, and agricultural geography.

The fellowships apply in the following universities and colleges: California, Chicago, Cornell, Harvard, Illinois, Iowa State, Michigan State,

Cornell University

The Department of Rural Sociology provides Extension, research, and teaching assistantships paying \$2,942 and up annually plus full waiver of tuition. These grants are available only to graduate students majoring in rural sociology who are full candidates for a degree.

For further information contact Dr. Harold R. Capener, Head, Department of Rural Sociology, New York State College of Agriculture, Cornell University, Ithaca, New York 14850. □

Minnesota, North Carolina State, Purdue, and Wisconsin.

Applications are made through State Directors of Extension to Dr. Joseph Ackerman, Managing Director, Farm Foundation, 600 South Michigan Avenue, Chicago, Illinois 60605.

Forms are available from State Extension Directors. Applications must reach the Farm Foundation by March 1. □

The University of Chicago

Extension staff members seeking to earn the M.A. or Ph.D. degrees in adult education are encouraged to write to William S. Griffith, Chairman, Adult Education Committee, The University of Chicago, 5835 South Kimbark Avenue, Chicago, Illinois 60637, setting forth their academic background, their experience, and their career aspirations. From this information a determination will be made of the possible sources of financial assistance.

A number of \$6,000 fellowships supported by the Carnegie Corporation may be awarded to individuals who seek to follow a career in the administration of university adult education.

Special funds have been earmarked for the support of an outstanding applicant from the field of home economics.

A number of staff associateships, research assistantships, and tuition scholarships are also available.

The closing date for the acceptance of applications for the 1969-70 awards is February 1. Detailed information regarding the M.A. and the Ph.D. programs is available on request. □

Ohio State University

The Ohio State University offers one research assistantship of \$3,600 and a number of university fellowships on a competitive basis — about \$2,400 each. All assistantships and fellowships include waiver of fees.

Application deadline is February 1. Contact Dr. C. J. Cunningham, Ohio Extension Service, 2120 Fyffe Road, The Ohio State University, Columbus, Ohio 43210. □

University of Wisconsin

The University of Wisconsin offers a limited number of assistantships in the Division of Staff Development consisting of \$275 per month for 12 months plus a waiver of out-of-State tuition. Contact Jerold W. Apps, Acting Director, Division of Staff Development, 432 North Lake Street, Madison, Wisconsin 53706. □

Farm Foundation Scholarships in Public Agricultural Policy

The Farm Foundation is offering 100 scholarships of \$100 each (25 to each Extension Region) for county agricultural and home agents attending the 1969 Regional Extension Summer School courses in public agricultural policy. Fifty-five scholarships of \$100 each are available for the 1969 Regional Extension Winter School course in public agricultural policy.

Applications should be made by January 1 for Winter School and by March 1 for Summer School. They should be sent through the State Director of Extension to Dr. Joseph Ackerman, Managing Director, Farm Foundation, 600 South Michigan Avenue, Chicago, Illinois 60605. □

Michigan State University

The Department of Resource Development, Michigan State University, offers five assistantships to students working on graduate degrees. Three research assistantships and two teaching assistantships with stipends of \$2,300 for master's degree candidates and \$2,600 for doctoral candidates are available.

Students devote half their time to departmental research or teaching assignments for 9 months. A maximum of 16 credits (research) or 12 credits (teaching) may be taken each term.

Applications should be submitted before March 1 to the Department of Resource Development, Room 323 Natural Resources Building, Michigan State University, East Lansing, Michigan 48823. □

Florida State University

National Defense Education Act fellowships: First year \$2,000, second year \$2,200, third year \$2,400, plus \$400 per year for each dependent.

Departmental assistantships: For master's degree students — \$2,000 for 9 months; for doctoral students — \$3,000 for 10 months.

University fellowships: For master's degree students — \$2,400 for 12 months; for doctoral students — \$3,000 for 12 months.

Internships in various phases of adult education: Annual stipends ranging from \$2,000 to \$6,000.

For further information contact Dr. George Aker, Head, Department of Adult and Continuing Education, College of Education, Florida State University, Tallahassee, Florida 32306. □

North Carolina State

The Departments of Economics, Sociology, and Psychology of North Carolina State University will award approximately 15 special Kellogg Fellowships to qualified employees of public agencies for graduate study in the social sciences during the academic year 1969-70.

Fellowships will be awarded mainly to people working in Southern States, but one or two may be granted to others.

Study may be applied toward an advanced degree. Maximum stipend will be \$4,500. The curriculum will include an interdisciplinary seminar for professional workers who are concerned with aiding poverty-stricken rural families.

Candidates are to be nominated by their chief administrative officers. Deadline date for receipt of nominations is March 15, 1969. Send nominations or requests for further information to the Department of Economics, North Carolina State University, P.O. Box 5368, Raleigh, North Carolina 27607. Official application forms will be sent directly to nominees, after nomination by their chief administrative officer. □

University of Kentucky Assistantships

The Center for Developmental Change will award assistantships to outstanding M.A. and Ph.D. candidates desiring to concentrate on the developmental change aspects of their disciplines. The Center correlates certain domestic and international research, action, and training programs. Domestic projects are focused on Kentucky and Appalachia, with regional studies of urban and rural problems. The international projects include technical assistance and educational support programs.

Applicants must meet the standards of the Graduate School and their department as well as of the Center. Selected candidates will work under Center supervision on research projects or action programs in which the Center has a special interest; supervision of a student's academic program remains in the department in which he seeks a degree.

Assistantships are for a period of 10 months and include an out-of-

State tuition waiver. Awards are \$2,400 for students working for the master's degree; \$3,000 for students with a master's working on a doctorate, and \$3,600 for students who have successfully completed pre-thesis examinations for the Ph.D.

For information write Walter A. Graham, Administrative Officer, Center for Developmental Change, University of Kentucky, Lexington, Kentucky 40506. □

Kenneth F. Warner Scholarship

Mu Chapter of Epsilon Sigma Phi will award one scholarship of \$100 to a county Extension agent enrolled in a 3-week Extension teaching methods course.

Application should be made on the prescribed form available from the Staff Development Office, Federal Extension Service, and returned by March 1 preceding the course. □

University of Maryland

Two graduate assistantships in the Department of Agricultural and Extension Education are available to Extension workers interested in pursuing the M.S. or Ph.D. degree in Extension education.

Additional assistantships may become available. Assistantships are for 12 months and pay \$270 per month or \$3,240 for the 12-month period, plus remission of fees which amount to \$936. Application deadline is April 1.

Contact Dr. V. R. Cardozier, Head, Department of Agricultural and Extension Education, University of Maryland, College Park, Maryland 20742. □

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The \$100,000,000,000 Bridge!

Each year consumers spend about \$140 billion for the food and fiber produced on U.S. farms. Only about \$42 billion of this finds its way to the Nation's farmers. The difference, roughly \$98 billion, represents the value added by processing and distribution.

There's yet another marketing cost. It is the \$15 billion farmers pay to commercial suppliers of goods and services needed in the production of farm commodities. This comes out of the \$42 billion that reaches farmers.

The overall goal of the food and fiber marketing system is simple. It is to achieve an efficient and competitive system that provides an equitable return to the participants and a wide range of consumer choices for food and fiber products at reasonable prices. Improving the performance of this system is what the Extension Marketing and Utilization program is all about.

Start with the characteristics of the system:

(1) It is a vast system — about \$115 billion a year including costs of supplies and services.

(2) Literally thousands of independent units make up the system. They range in size from one man owned and operated to the multi-million dollar giants. Each makes a whole set of decisions that affect efficiency of the whole system.

(3) The system includes every type of business organization known in the modern business world.

(4) It employs, in one way or another, most of the known skills.

The Marketing Subcommittee of the Extension Committee on Organization and Policy recently completed a report outlining the educational needs of improving the performance of the system. The report also outlines opportunities and responsibilities of Extension to meet these needs. ECOP accepted the report at its August 1968 meeting.

Opportunities for improving the effectiveness of the system begin with the planting decisions of the farmers and end with the consumer. And there are opportunities at every step in between. Extension workers at all levels have opportunities to make educational inputs to improve efficiency of the system. The following areas of educational needs listed in the ECOP approved report make the opportunities for education at your particular level obvious:

(1) To improve the marketing decisions of individual producers and producer groups on all points affecting what, when, where, and how to sell.

(2) To develop new and improved systems for marketing and processing through better understanding of market requirements, better coordination, and helping appraise opportunities for improving the system.

(3) To improve the efficiency of supply, marketing, and processing firms.

(4) To expand both domestic and foreign markets for farm products.

(5) To develop new and improved processes and products.

(6) To aid development of new farm supply and marketing enterprises through feasibility studies.

(7) To improve the purchasing decisions of household consumers through better understanding of prices and supplies, quality factors, and grading standards.

Meeting these educational needs will require a well coordinated approach of the many disciplines of Extension and between Extension and research. The benefits to the entire society of increased efficiency in the marketing system are as unlimited as is the potential for increasing efficiency.

The challenge is before us at every level—county, State, region, and Nation.—WJW